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configuring the removable electronics device to detect the one or more pre-defined motions based at least in part on the one or more second pre-defined parameters.

4. The removable electronics device of claim 3, wherein: configuring the removable electronics device to detect the one or more pre-defined motions based at least in part on the one or more first pre-defined parameters comprises configuring one or more machine-learned models to detect the one or more pre-defined motions based at least in part on the one or more first pre-defined parameters; and

configuring the removable electronics device to detect the one or more pre-defined motions based at least in part on the one or more second pre-defined parameters comprises configuring the one or more machine-learned models to detect the one or more pre-defined motions based at least in part on the one or more second pre-defined parameters.

5. The removable electronics device of claim 4, wherein: configuring the one or more machine-learned models to detect the one or more pre-defined motions based at least in part on the one or more first pre-defined parameters comprises configuring the one or more machine-learned models to detect the one or more pre-defined motions using a first set of weights associated with the first pre-fabricated sensor assembly; and configuring the one or more machine-learned models to detect the one or more pre-defined motions based at least in part on the one or more second pre-defined parameters comprises configuring the one or more machine-learned models to detect the one or more pre-defined motions using on a second set of weights associated with the second pre-fabricated sensor assembly.

6. The removable electronics device of claim 3, wherein: configuring the removable electronics device to detect the one or more pre-defined motions based at least in part on the one or more first pre-defined parameters comprises obtaining one or more first machine-learned models for detecting the one or more pre-defined motions; and

configuring the removable electronics device to detect the one or more pre-defined motions based at least in part on the one or more second pre-defined parameters comprises obtaining one or more second machine-learned models for detecting the one or more pre-defined motions.

7. The removable electronics device of claim 1, wherein: the first communication interface is configured to physically and removably couple the removable electronics device to the one or more remote computing devices; the second communication interface is configured to physically and removably couple the removable electronics device to the first pre-fabricated sensor assembly and the second pre-fabricated sensor assembly; and the removable electronics device includes a wireless network interface configured to communicatively couple the removable electronics device to at least one remote computing device.

8. The removable electronics device of claim 1, wherein the first sensor layout includes a least one of a different number of sensing elements, a different spacing of sensing elements, or a different sensing element material, relative to the second sensor layout.

9. The removable electronics device of claim 1, wherein: the removable electronics device is configured to provide power to sensing circuitry for the first set of sensing

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elements of the first pre-fabricated sensor assembly when the removable electronics device is physically coupled to the first pre-fabricated sensor assembly; and the removable electronics device is configured to provide power to sensing circuitry for the second set of sensing elements of the second pre-fabricated sensor assembly when the removable electronics device is physically coupled to the second pre-fabricated sensor assembly.

10. The removable electronics device of claim 1, further comprising:

an interactive backpack including the first pre-fabricated sensor assembly; and

an interactive jacket including the second pre-fabricated sensor assembly.

11. A computer-implemented method of analyzing touch input for interactive objects, comprising:

detecting, by one or more processors of a removable electronics device, that the removable electronics device is physically coupled to a first pre-fabricated sensor assembly comprising a first touch sensor having a first set of sensing elements, the first set of sensing elements having a first sensor layout;

obtaining, by the one or more processors and in response to detecting that the removable electronics device is physically coupled to the first pre-fabricated sensor assembly, one or more first pre-defined parameters associated with the first touch sensor of the first pre-fabricated sensor assembly;

configuring, by the one or more processors, the removable electronics device to detect one or more pre-defined motions using the one or more first pre-defined parameters in response to touch data associated with the first pre-fabricated sensory assembly;

detecting, by the one or more processors, that the removable electronics device is physically coupled to a second pre-fabricated sensor assembly comprising a second touch sensor having a second set of sensing elements, the second set of sensing elements having a second sensor layout that is different from the first sensor layout;

obtaining, by the one or more processors and in response to detecting that the removable electronics device is physically coupled to the second pre-fabricated sensor assembly, one or more second pre-defined parameters associated with the second touch sensor of the second pre-fabricated sensor assembly; and

configuring, by the one or more processors, the removable electronics device to detect the one or more pre-defined motions using the one or more second pre-defined parameters in response to touch data associated with the second pre-fabricated sensor assembly.

12. The computer-implemented method of claim 11, further comprising:

obtaining, via a communication interface of the removable electronics device, the touch data associated with the first pre-fabricated sensor assembly;

analyzing, by the one or more processors, the touch data associated with the first pre-fabricated sensor assembly to detect the one or more pre-defined motions based at least in part on the one or more first pre-defined parameters associated with the first touch sensor of the first pre-fabricated sensor assembly;

obtaining, via the communication interface of the removable electronics device, the touch data associated with the second pre-fabricated sensor assembly; and

analyzing, by the one or more processors, the touch data associated with the second pre-fabricated sensor